

Express Mail Label No.: 100103

UTILITY PATENT APPLICATION TRANSMITTAL
(Small Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.
APV31204CIPA

Total Pages in this Submission: 031

US PTO
031088
0/674435

100103

TO THE ASSISTANT COMMISSIONER FOR PATENTS

Box Patent Application
Washington, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

CENTRIFUGAL CASTING OF TITANIUM ALLOYS WITH IMPROVED SURFACE QUALITY, STRUCTURAL INTEGRITY AND MECHANICAL PROPERTIES IN ISOTROPIC GRAPHITE MOLDS UNDER VACUUM

and invented by:

Ranjan RAY
Donald W. SCOTT

If a **CONTINUATION APPLICATION**, check appropriate box and supply the requisite information:

Continuation Divisional Continuation-in-part (CIP) of prior application No.: 10/443,807

Which is a:

Continuation Divisional Continuation-in-part (CIP) of prior application No.: 10/163,345

Which is 3:

Continuation Divisional Continuation-in-part (CIP) of prior application No.: _____

Enclosed are:

Application Elements

1. Filing fee as calculated and transmitted as described below
2. Specification having 34 pages and including the following:
 - a. Descriptive Title of the Invention
 - b. Cross References to Related Applications (*if applicable*)
 - c. Statement Regarding Federally-sponsored Research/Development (*if applicable*)
 - d. Reference to Sequence Listing, a Table, or a Computer Program Listing Appendix
 - e. Background of the Invention
 - f. Brief Summary of the Invention
 - g. Brief Description of the Drawings (*if filed*)
 - h. Detailed Description
 - i. Claim(s) as Classified Below
 - j. Abstract of the Disclosure

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Application Elements (Continued)

3. Drawing(s) (*when necessary as prescribed by 35 USC 113*)
 - a. Formal Number of Sheets _____ 12 _____
 - b. Informal Number of Sheets _____
4. Oath or Declaration
 - a. Newly executed (*original or copy*) Unexecuted
 - b. Copy from a prior application (37 CFR 1.63(d)) (*for continuation/divisional application only*)
 - c. With Power of Attorney Without Power of Attorney
 - d. DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) named in the prior application,
see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5. Incorporation By Reference (*usable if Box 4b is checked*)
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under
Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby
incorporated by reference therein.
6. CD ROM or CD-R in duplicate, large table or Computer Program (Appendix)
7. Application Data Sheet (See 37 CFR 1.76)
8. Nucleotide and/or Amino Acid Sequence Submission (*if applicable, all must be included*)
 - a. Computer Readable Form (CFR)
 - b. Specification Sequence Listing on:
 - i. CD-ROM or CD-R (2 copies); or
 - ii. Paper
 - c. Statement(s) Verifying Identical Paper and Computer Readable Copy

Accompanying Application Parts

9. Assignment Papers (cover sheet & document(s))
10. 37 CFR 3.73(B) Statement (when there is an assignee)
11. English Translation Document (if applicable)
12. Information Disclosure Statement/PTO-1449 Copies of IDS Citations
13. Preliminary Amendment
14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. Certificate of Mailing
 First Class Express Mail (*Specify Label No.*): _____

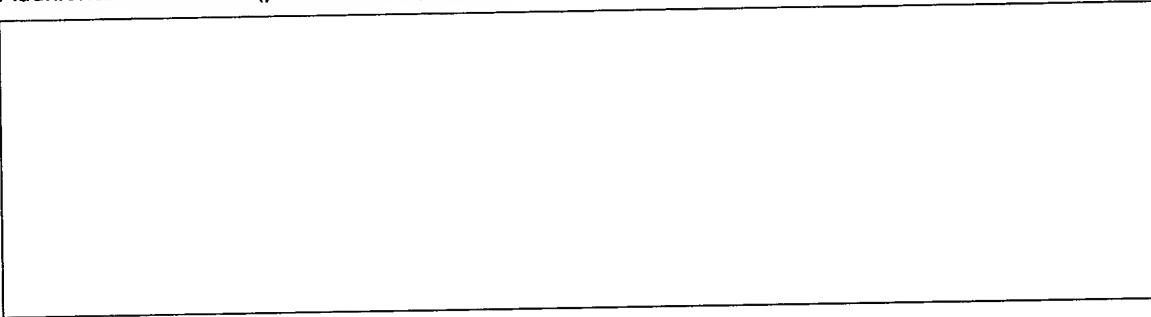
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Accompanying Application Parts (Continued)

17. Applicant claims small entity status. See 37 CFR 1.27.
 (Optional) Small Entity Statement(s) - Specify Number of Statements Submitted: _____
18. Additional Enclosures (*please identify below*):


Request That Application Not Be Published Pursuant To 35 U.S.C. 122(b)(2)

19. Pursuant to 35 U.S.C. 122(b)(2), Applicant hereby requests that this patent application not be published pursuant to 35 U.S.C. 122(b)(1). Applicant hereby certifies that the invention disclosed in this application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing of the application.

Warning

An applicant who makes a request not to publish, but who subsequently files in a foreign country or under a multilateral international agreement specified in 35 U.S.C. 122(b)(2)(B)(i), must notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.

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Fee Calculation and Transmittal

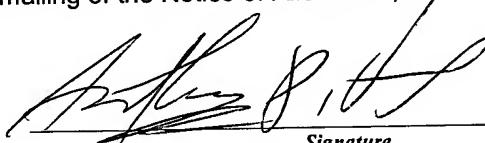
CLAIMS AS FILED

| For | #Filed | #Allowed | #Extra | Rate | Fee |
|---|--------------------------|----------|--------|-------------------------|-----------------|
| Total Claims | 23 | - 20 = | 3 | x \$9.00 | \$27.00 |
| Indep. Claims | 4 | - 3 = | 1 | x \$43.00 | \$43.00 |
| Multiple Dependent Claims (check if applicable) | <input type="checkbox"/> | | | | \$0.00 |
| | | | | BASIC FEE | \$385.00 |
| OTHER FEE (specify purpose) | | | | | |
| | | | | TOTAL FILING FEE | \$455.00 |

- A check in the amount of **\$455.00** to cover the filing fee is enclosed.
- The Commissioner is hereby authorized to charge and credit Deposit Account No. **19-4375** as described below. A duplicate copy of this sheet is enclosed.
 - Charge the amount of _____ as filing fee.
 - Credit any overpayment.
 - Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
 - Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Dated:

Oct. 1, 2003



Signature

Anthony P. Venturino

Reg. No. 31,674

Customer no. 24257

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